## BACHELOR OF BUSINESS ADMINISTRATION (SERVICES MANAGEMENT)

[(BBA(SM)]

## Term-End Examination June, 2025

## BSM-008 : BASIC QUANTITATIVE TECHNIQUES

Time: 2 Hours Maximum Marks: 50

Note: Attempt all questions.

- 1. Answer all the questions. Each question carries 1 mark.
  - (a) State whether the following statements are true/false: 1×5=5
    - (i) Statistics is primarily concerned with counting and calculating.

- (ii) Gender (Male/Female) is an example of quantitative data.
- (iii) A bar chart is a suitable graphical representation for displaying the distribution of various classes of the college.
- (iv) The mode of a dataset is always unique.
- (v) The sum of pie chart is 360°.
- (b) Fill in the blanks:

 $1 \times 5 = 5$ 

- (i) The range is calculated by subtracting the ...... from the largest value in a dataset.
- (ii) A histogram is a graphical representation suitable for displaying the ...... of a dataset.

- (iii) The standard deviation of 12, 12, 12, 12 is ......
- (iv) The ..... is the most appropriate measure of central tendency for skewed datasets.
- (v) The standard deviation is a measure of ...... that indicates how spread out the values in a dataset are.
- 2. Briefly explain any *five* of the following in about **100** words each:  $2\times5=10$ 
  - (a) Regression
  - (b) Variance
  - (c) Normal Distribution
  - (d) Skewness
  - (e) Z-Score
  - (f) Random Sample
  - (g) Correlation
  - (h) Hypothesis

- 3. Answer any *four* of the following questions in about **250** words each. Each question carries 5 marks: 5×4=20
  - (a) Differentiate between Qualitative and Quantitative Data.
  - (b) Explain the concept of range in statistics.
  - (c) Discuss the advantages and disadvantages of using a bar chart.
  - (d) What is the purpose of calculating the coefficient of variation in data analysis?
  - (e) Describe the steps involved in constructing a frequency distribution.
  - (f) Explain the difference between positive skewness and negative skewness in a distribution.

- 4. Answer any *one* of the following questions in about **500** words. Each question carries 10 marks: 1×10=10
  - (a) Examine the implications and advantages of compound interest in financial scenarios, particularly in the context of a ₹ 60,000 deposit compounded annually at a 9% rate over 5 years.
  - (b) Provide a comprehensive explanation of skewness, covering its significance in statistical analysis and how it measures the asymmetry of a distribution.

